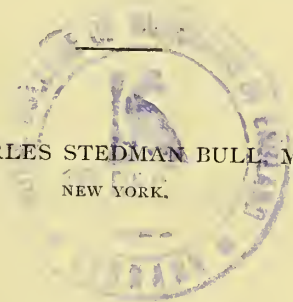


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TWO CASES OF  
UNILATERAL TEMPORAL HEMIANOPSIA.

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NEW YORK.



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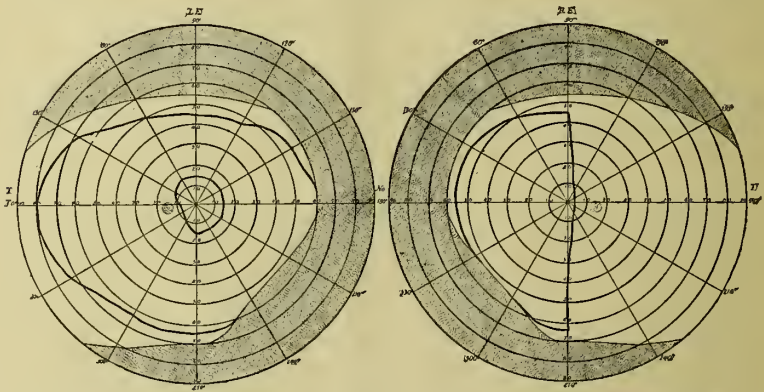
## TWO CASES OF UNILATERAL TEMPORAL HEMIANOPSIA.

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### UNILATERAL TEMPORAL HEMIANOPSIA, WITH CENTRAL SCOTOMA OF THE OTHER EYE.

COL. N——, aged sixty-six, a retired officer of the army, was first seen in consultation by me on June 28th, 1884, and gave the following history: In the summer of 1849, while at one of the military posts on our western frontier, he was struck by lightning while standing at the door of his tent. He fell to the ground and remained unconscious for several hours. When he regained his consciousness, he discovered that he was blind in both eyes, but this condition rapidly improved, so that at the end of a few days he had regained his sight, and in a short space of time had the perfect possession of all his faculties. He remained perfectly well in every respect till 1857, nearly eight years later, when the muscles of the left thigh and leg began to atrophy, and almost simultaneously there suddenly appeared a temporal hemianopsia of the right eye. The paresis and atrophy of the muscles of the left lower extremity slowly but steadily progressed till 1859, since which time there has been no change. There has been no change in the field or in the acuity of vision of the right eye since the hemianopsia first appeared. He walks with comparative ease, but the muscles of the left leg are markedly smaller than those of the opposite side, and he easily becomes fatigued. In December, 1883, or about six months before I saw him, he noticed a central obscuration of vision of the left eye, which came on suddenly, and this scotoma has existed

ever since, and he thinks has grown larger. He has never had rheumatism or syphilis, has no hypertrophy or valvular disease of the heart, and repeated and very careful examination of the urine has not revealed any signs of chronic degenerative nephritis. He has had intermittent fever of the congestive type several times severely, and during the past six months he has had several attacks of fainting, which have occurred without any warning. He has never been addicted to drinking, and for many years has not touched alcohol in any shape, but he has all his life chewed and smoked tobacco to excess. He was a man of fine physique, with snow-white hair, but with a rather feeble, cautious gait. On testing the



vision it was found in the R. E. =  $\frac{15}{30} +$ , with absolutely no vision on the temporal side of the median vertical plane of the eye. In the L. E., V. =  $\frac{6}{100}$  eccentrically. A very careful examination of the field of vision was then made and repeated at each subsequent visit, but all the examinations gave the same result. In the right eye there was entire loss of the temporal half of the field. In the left eye there was concentric narrowing of the field and also a central scotoma, which was in shape an irregular oval, with the long diameter, of about  $30^\circ$ , vertical, and the short diameter,  $20^\circ$ , horizontal. An ophthalmoscopic examination showed that the media were perfectly transparent, and oblique illumination proved that the iris was normal in color and reaction. Both optic discs were

of a dirty, grayish-white color, and in the left eye the outline of the papilla was ill-defined and at places swollen, as is met with after a neuritis. In each disc there was a deep, overhung excavation, almost glaucomatous in character, with pulsating veins, but no pulsation in the arteries. In the left eye, in the region of the macula, was a large irregular retinal hemorrhage, of the apparent size of two or three papillæ, with its long diameter vertical, which was of a different tint in different portions, showing that there had been several extravasations at different periods. The centre was evidently the oldest in date and the blood had been partially absorbed, giving here and there a glimpse of white sclera showing through an atrophied choroid. The rest of the fundus in both eyes varied but little from the normal in its appearance. The tests for color-blindness showed that in the left eye the color-sense was defective for all but blue, while in the nasal half of the field of the right eye it was normal though sluggish. The tension was normal in both eyes.

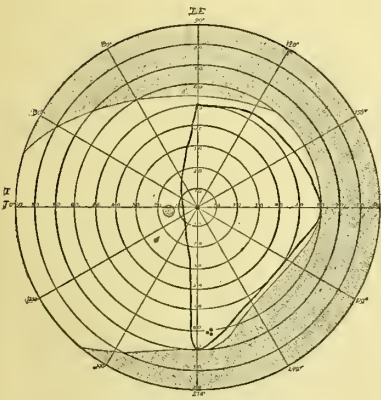
Between June 28, 1884, and March 24, 1885, I saw the patient at intervals of three or four weeks, but never discovered any change in the condition of the eyes. On the latter date he complained of seeing what he called a "ball of fire" at times in front of the left eye, of transient duration, which was always followed by a spiral or cork-screw appearance of light, which lasted some seconds. In testing the vision of the left eye at this date, I found that it had improved to  $\frac{1}{4}$  eccentrically in the nasal half of the field; but there was no change in the ophthalmoscopic appearances, except a gradual absorption of the extravasated blood in the region of the macula, and no recurrence of the hemorrhage.

UNILATERAL IRREGULAR HEMIANOPSIA, WITH CONCENTRIC  
LIMITATION OF THE FIELD OF VISION OF THE  
SAME EYE.

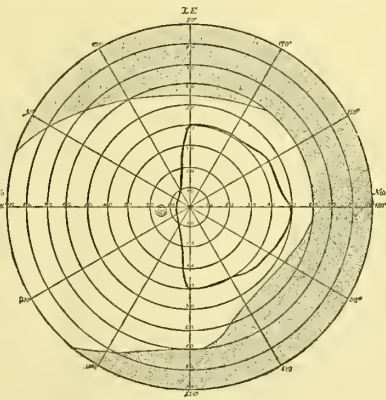
Mr. D. W., aged sixty, was brought to me on March 27, 1885, and gave the following history: On Christmas Day, 1884, while standing on a street crossing, he was knocked

down and trampled upon by a horse. When picked up, he was unconscious, and there was an extensive laceration of the scalp covering the frontal bone above the left eye. He was carried in an ambulance to his house, and in the transit regained his consciousness, so that on arrival at his residence he got out with assistance and walked upstairs to his bedroom. He then again became unconscious, and remained either semi-comatose or wildly delirious for about four weeks. Two ribs on the right side were fractured at the time of the accident. An examination of the scalp-wound, which was of an irregular shape and about three inches long, showed that it extended from above close to the hairy scalp, downwards and inwards towards the median line of the left eyebrow. Beneath this laceration was a depressed fracture of the skull, of some considerable extent. The patient was not trephined, but was treated mainly on the expectant plan. Erysipelas of the scalp developed within the first week, beginning at the wound and extending all over the face and scalp. Both eyes were closed from the swelling of the eyelids, and this condition lasted for several weeks. When he regained complete consciousness and the swelling of the eyelids had disappeared, he noticed that he could see nothing on his left side if the right eye were closed, and this condition remained unchanged till I saw him. In addition to the so-called left temporal hemianopsia, he complained that whenever he attempted to write, everything swam before him, but said that he could read with ease for any length of time without fatigue. He had always been hypermetropic, but had never worn glasses for distant vision. An examination showed V. =  $\frac{4}{5}$  + in both eyes, and with sph. + 2. D. =  $\frac{1}{3}$  +. He also read Snellen 0.25 at 10" with sph. + 4. D. An examination of the field of vision showed that it was perfectly normal in the right eye, but in the left eye there was a well-marked though somewhat irregular temporal hemianopsia. The color perception was normal in the right eye and normal in the perfect half of the field of the left eye. An ophthalmoscopic examination showed on the right side a normal hypermetropic fundus with clear media, but in the left eye the optic disc was white with clearly defined out-

lines, and the arteries were reduced in calibre. The tension was normal in both eyes. There was no tenderness on pressure over the seat of the fracture in the frontal bone, nor along the course of the supra-orbital nerve; on the contrary the patient has complained of a numbness along the course and distribution both of the supra-orbital and infra-orbital nerves, since he regained his consciousness. This patient was seen by me at intervals of a few days from March 27th to June 22d, and there has been no change in any of the conditions, except a gradually increasing concentric narrowing of



March 27, 1885.



June 22, 1885.

the nasal half of the field in the left eye. His last visit was made on June 22d, at which time a careful examination was again made of the field, and his vision also tested. The accompanying charts show the condition of the field of the left eye at the date of his first visit, March 27th, and of last visit, June 22d; the latter also shows the gradual concentric narrowing of the nasal half of the field. A possible explanation of the visual defect in this case may lie in an extension of the line of fracture from the frontal bone through the roof of the orbit, backwards to the optic foramen, and a consequent injury to the fibres of the optic nerve which are distributed to the nasal half of the retina. There seems to be but little doubt that the amblyopia is progressive and that the pseudo-hemianopsia will end in complete amaurosis of one eye.

